


EXHIBIT B

<div>US9706476</div> <div>1. A method for obtaining radio access network information, comprising:</div>	<div>Anritsu MS2692A (“The accused product”)</div> <div>In at least testing and usage, the accused product will comply with and use the 5G standard. The 5G standard dictates a method for obtaining radio access network information.</div> <div><div><div>Signal Analyzers</div><div>MS2692A</div><div>The Signal Analyzer base units include swept spectrum analysis, FFT signal analysis, and a precision digitizer function.</div><div>REQUEST QUOTE</div><div>DOWNLOADS</div></div><div></div><div>https://www.anritsu.com/en-US/test-measurement/products/ms2692a</div><div><div><div>➔ Spectrum Analyzer/Signal Analyzer MS2690A (50 Hz to 6 GHz)</div><div>➔ Spectrum Analyzer/Signal Analyzer MS2691A (50 Hz to 13.5 GHz)</div><div>➔ <u>Spectrum Analyzer/Signal Analyzer MS2692A (50 Hz to 26.5 GHz)</u></div><div>➔ Vector Signal Generator MG3710E (100 kHz to 2.7/4/6 GHz)</div></div><div>Supports 5G NR Sub-6GHz</div><div>For <u>evaluation of TRx characteristics at R&D of 5G NR chipsets, communications modules, smartphones, base stations, and other radio equipment.</u> Also for researching new applications using 5G NR.</div><div>https://www.anritsu.com/en-us/test-measurement/technologies/5g-everything-connected/5g-solutions</div><div><div><div>Description</div><div>Features</div><div>Technologies</div></div><div><div><ul style="list-style-type: none">• Frequency Range: 50 Hz to 26.5 GHz• Analysis Bandwidth<ul style="list-style-type: none">◦ 31.25 MHz (standard)◦ 62.5 MHz / 125 MHz (option)• <u>Supports 5G NR (sub-6 GHz) TDD/FDD</u><div>Wide measurement dynamic range EVM performance: <0.5%</div><div>One-button dynamic-range optimization at EVM measurement</div><ul style="list-style-type: none">• Offers modulation analysis, such as LTE/LTE-Advanced (FDD/TDD), WLAN IEEE 802.11ac etc. (with optional software)• One-Box Tester with the addition of the Signal Generator option• Batch Capture Measurements for the fastest analysis time• Supports Noise Figure measurement (option)</div></div><div>https://www.anritsu.com/en-US/test-measurement/products/ms2692a</div></div></div></div>
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3rd Generation Partnership Project;
Technical Specification Group Services and System Aspects;
Release 15 Description;
Summary of Rel-15 Work Items
(Release 15)

<https://www.3gpp.org/release-15>

<https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3389>

<https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3198>

 **Release 15**

NR

- The 5G System – Phase 1
- Massive MTC and Internet of Things (IoT)
- Vehicle-to-Everything Communications (V2x) Phase 2
- Mission Critical (MC) interworking with legacy systems
- WLAN and unlicensed spectrum use
- Slicing – logical end-2-end networks
- API Exposure – 3rd party access to 5G services
- Service Based Architecture (SBA)
- Further LTE improvements
- Mobile Communication System for Railways (FRMCS)

<https://www.3gpp.org/release-15>

As seen above, 5G is designed to support diverse services with different data traffic profiles (e.g., high throughput, low latency and massive connections) and models (e.g., IP data traffic, non-IP data traffic, short data bursts and high throughput data transmissions). Various PDU session types are supported including IPv4, IPv6, IPv4v6, Ethernet and Unstructured.

The 5G's main characteristic is the introduction of a new radio interface, the New Radio (NR), which offers the flexibility needed to support these very different types of services.

Another key characteristic of 5G is that the 5G Access Network can connect not only to a new 5G Core Network but also to the 4G (LTE) Core Network. This is known as the NSA architecture, while the 5G AN connected to a 5G CN is called the SA architecture.

NOTE: In this document, EPS and all the other concepts related to **LTE**, such as "**LTE** Advanced Pro", will be referred to as "**4G**", although this is not an official 3GPP terminology.

- the "Non-Stand Alone" (NSA) architecture, where the 5G Radio Access Network (AN) and its New Radio (NR) interface is used in conjunction with the existing LTE and EPC infrastructure Core Network (respectively 4G Radio and 4G Core), thus making the NR technology available without network replacement. In this configuration, only the 4G services are supported, but enjoying the capacities offered by the 5G New Radio (lower latency, etc). The NSA is also known as "E-UTRA-NR Dual Connectivity (EN-DC)" or "Architecture Option 3". See also the clause on EDCE5.

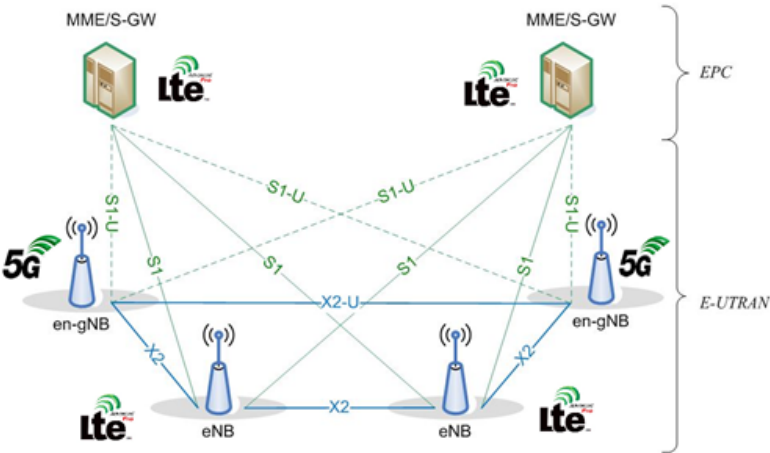


Figure 5.3.2-1: The NSA Architecture

Source: 5G Standard 3GPP TR 21.915 V15.0.0 (2019-09) pg. 11, <https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3389>

receiving, by a second radio access network controller, first radio access network information request information from a first radio access

In at least testing and usage, the accused product will comply with and use the 5G standard which dictates, receiving, by a second radio access network controller (e.g., eNB), first radio access network information request information (e.g. NAS Message transport and/or Unified Access Control via X2) from a first radio access network controller (e.g., en-gB).

network controller;

5.3.4 Overview of the Access Network

As a first approach, the architecture of the 5G AN is extremely simple since it consists in one single entity, the gNB, which connects to the 5G CN via the NG interface. It may also connect to another gNB via the Xn interface and/or to the 4G's eNB via the X2 interface, as shown below in the editor-proposed picture inspired from TS 38.401 [5] and TS 38.420 [6]. It also connects to the UE via the NR interface, not shown on the figure. Note that this AN architecture is rather similar in its principle to what was developed for LTE with the eNB, as can be seen in TS 36.401 [7].

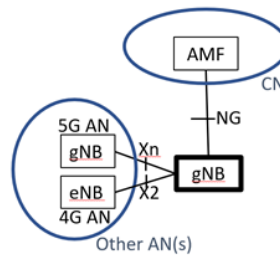


Figure 5.3.4-1: Overview of the AN interfaces

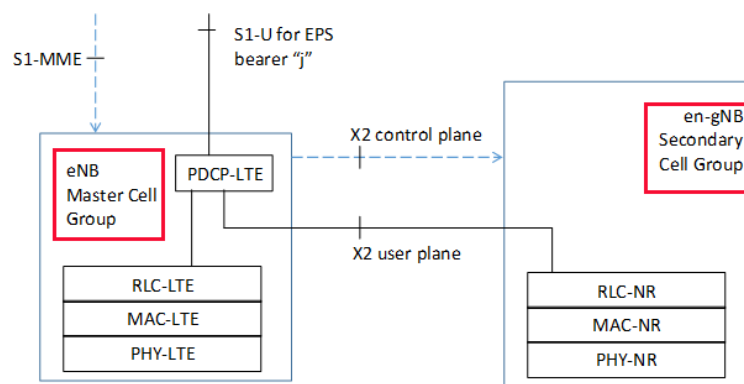


Figure 5.6.1.2-2: MCG split bearer in use for one EPS bearer of one UE (aka "architecture option 3")

The LTE connectivity to 5G-CN feature includes the following key functionalities:

- 5G NAS message transport
- 5G security framework, except that data integrity protection is not supported;
- Unified Access Control
- Flow-based QoS
- Network slicing
- SDAP
- NR PDCP
- Support of UEs in RRC_INACTIVE state.

Generally, the above functionalities are introduced based on similar functionalities as in NR.

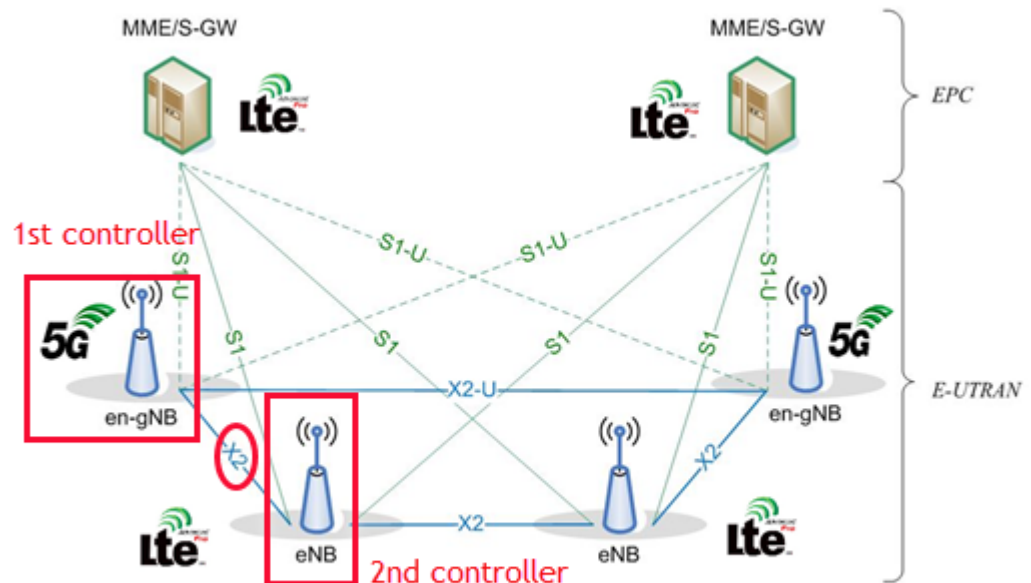


Figure 5.3.2-1: The NSA Architecture

10.2.1 EN-DC

The Secondary Node Addition procedure is initiated by the MN and is used to establish a UE context at the SN to provide resources from the SN to the UE. For bearers requiring SCG radio resources, this procedure is used to add at least the first cell of the SCG. This procedure can also be used to configure an SN terminated MCG bearer (where no SCG configuration is needed). Figure 10.2.1-1 shows the Secondary Node Addition procedure.

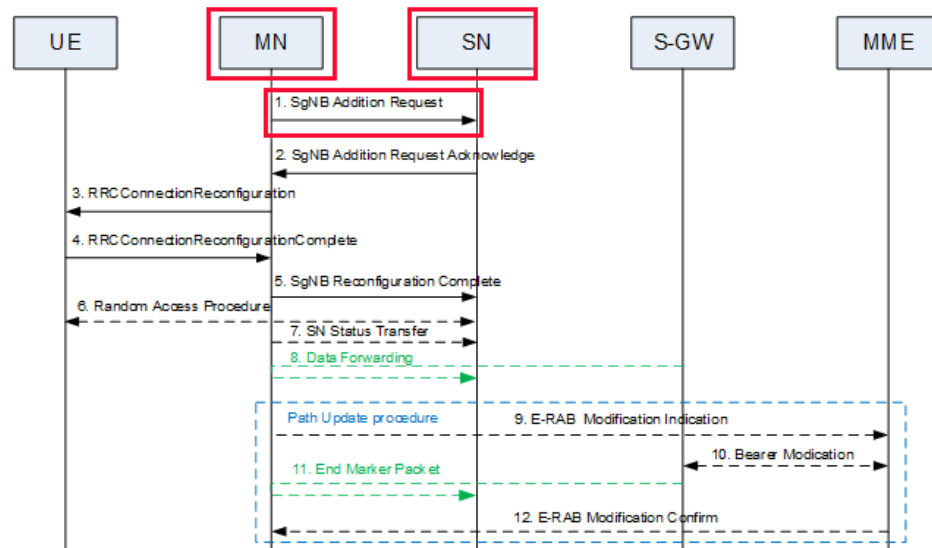


Figure 10.2.1-1: Secondary Node Addition procedure

Source: 5G Standard 3GPP TR 21.915 V15.0.0 (2019-09) pg. 11, 13, 37, 39
<https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3389>

Evolved Universal Terrestrial Radio Access (E-UTRA) and NR Multi-connectivity
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providing a first radio access network controller that is an access network node of a first radio access network standard;

In at least testing and usage, the accused product will comply with and use the 5G standard which dictates, a first radio access network controller (e.g., en-gNB) that is an access network node of a first radio access network standard (e.g., 5G network standard);

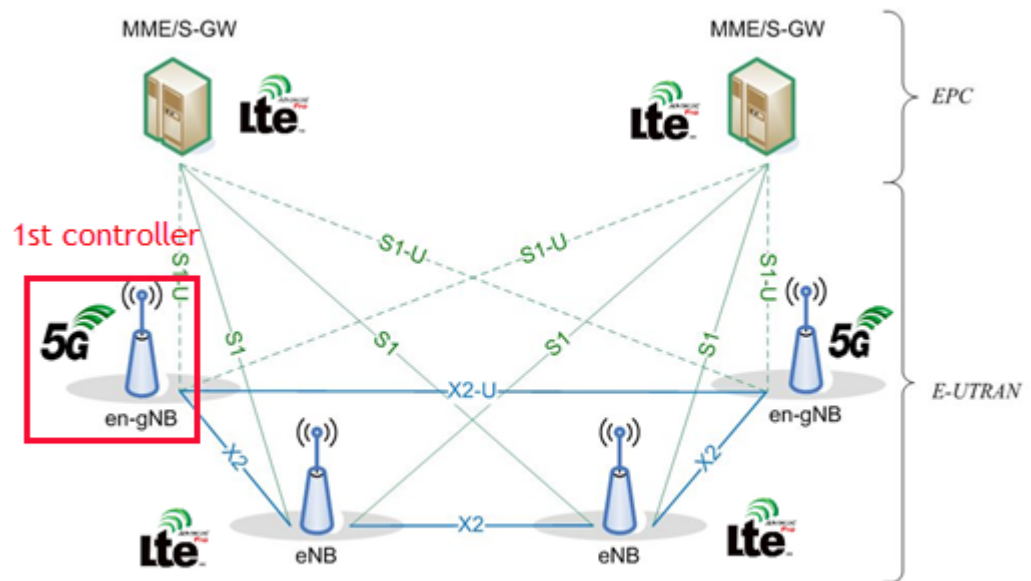


Figure 5.3.2-1: The NSA Architecture

10.2.1 EN-DC

The Secondary Node Addition procedure is initiated by the MN and is used to establish a UE context at the SN to provide resources from the SN to the UE. For bearers requiring SCG radio resources, this procedure is used to add at least the first cell of the SCG. This procedure can also be used to configure an SN terminated MCG bearer (where no SCG configuration is needed). Figure 10.2.1-1 shows the Secondary Node Addition procedure.

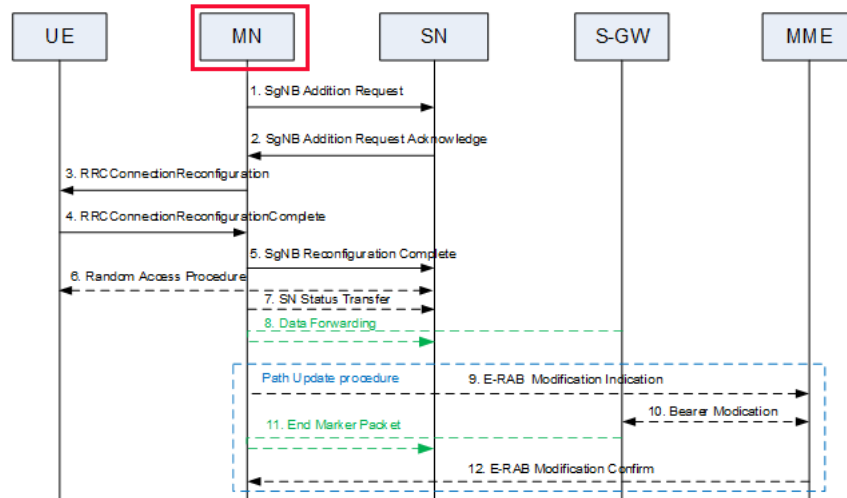


Figure 10.2.1-1: Secondary Node Addition procedure

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In at least testing and usage, the accused product will comply with and use the 5G standard which dictates, providing target radio access network information (e.g., S1 to eNB received from S-GW) that is radio access network information of a third radio access network controller (e.g., S-GW), the third radio access network controller being an access network node of a second radio access network standard (e.g., LTE).

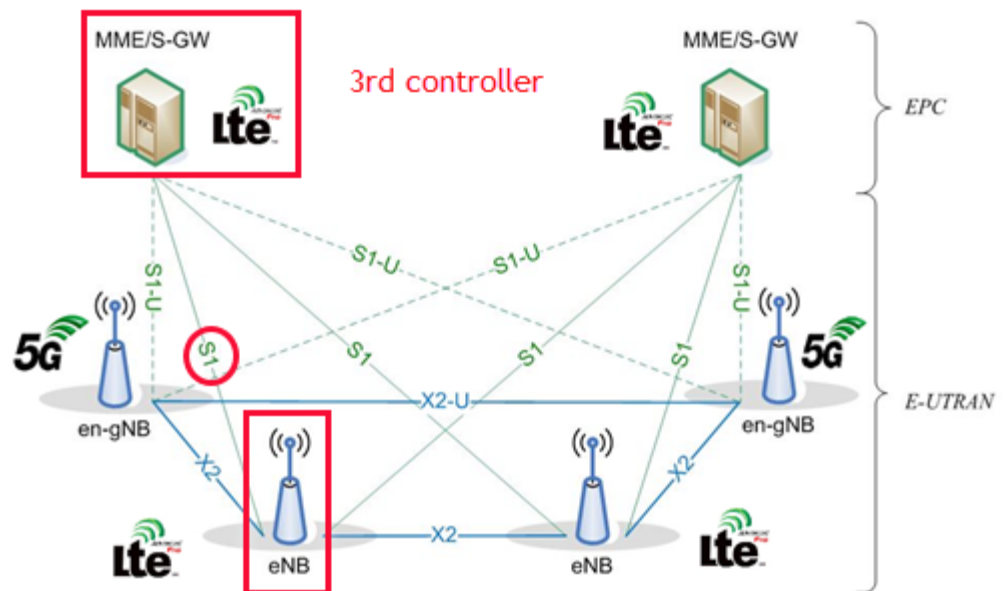


Figure 5.3.2-1: The NSA Architecture

4.1.2 MR-DC with the EPC

E-UTRAN supports MR-DC via E-UTRA-NR Dual Connectivity (EN-DC), in which a UE is connected to one eNB that acts as a MN and one en-gNB that acts as a SN. The eNB is connected to the EPC via the S1 interface and to the en-gNB via the X2 interface. The en-gNB might also be connected to the EPC via the S1-U interface and other en-gNBs via the X2-U interface.

10.2.1 EN-DC

The Secondary Node Addition procedure is initiated by the MN and is used to establish a UE context at the SN to provide resources from the SN to the UE. For bearers requiring SCG radio resources, this procedure is used to add at least the first cell of the SCG. This procedure can also be used to configure an SN terminated MCG bearer (where no SCG configuration is needed). Figure 10.2.1-1 shows the Secondary Node Addition procedure.

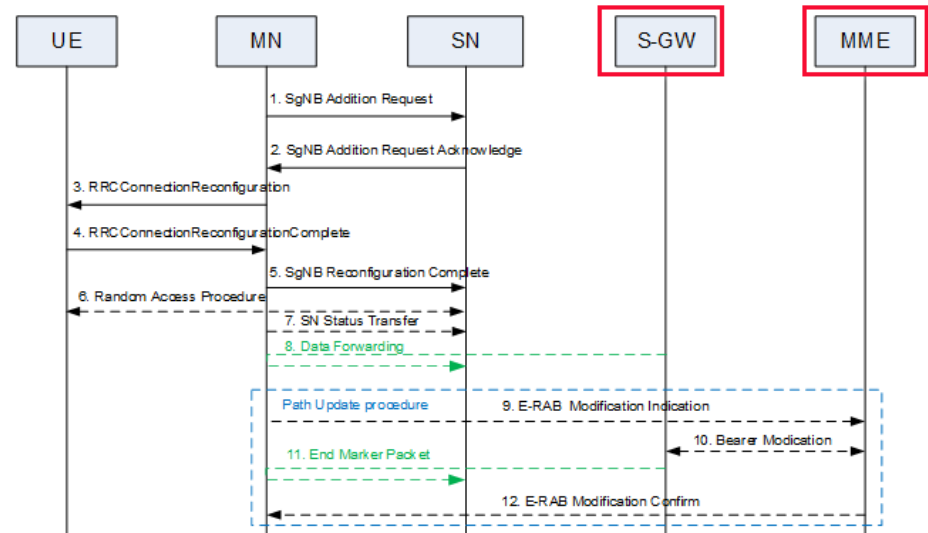
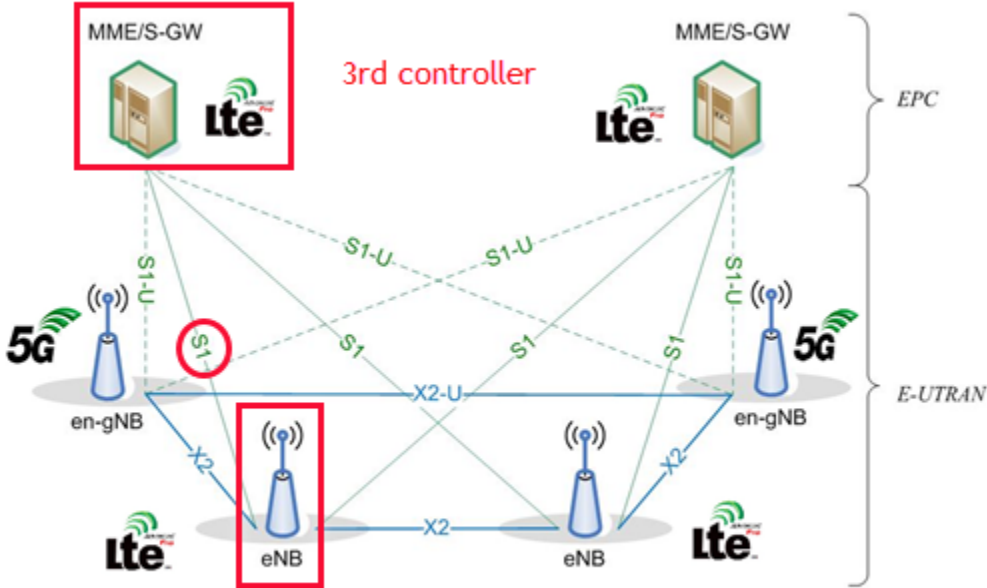


Figure 10.2.1-1: Secondary Node Addition procedure

	<p>Source: 5G Standard 3GPP TR 21.915 V15.0.0 (2019-09) pg. 11, 13, 37, 39 https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3389</p> <p>Evolved Universal Terrestrial Radio Access (E-UTRA) and NR Multi-connectivity 3GPP TS 37.340 V16.0.0 (2019-12) pg 11 https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3198</p>
using the first radio access network information request information to request the target radio access network information by using a first core network node of the second radio access network standard, or by using a second core network node of the first radio access network standard and the first core network node of the second radio access network standard;	<p>In at least testing and usage, the accused product will comply with and use the 5G standard which dictates, using the first radio access network information request information (as above) to request the target radio access network information by using a first core network node (e.g., S1 to the MME) of the second radio access network standard (e.g., LTE).</p>  <p>The diagram illustrates the NSA (Non-Standalone) Architecture, showing the interaction between the Evolved Packet Core (EPC) and the Evolved-UTRAN (E-UTRAN). The EPC consists of two MME/S-GW nodes, one labeled '3rd controller' and the other 'MME/S-GW'. The E-UTRAN consists of two en-gNB nodes (5G) and two eNB nodes (LTE). The diagram shows various interfaces: S1-U (dashed green lines) connecting MME/S-GW to en-gNB; S1 (solid green lines) connecting MME/S-GW to eNB; X2-U (dashed blue lines) connecting en-gNB to eNB; and X2 (solid blue lines) connecting eNB to eNB. A red circle highlights the S1 interface between the '3rd controller' MME/S-GW and the left en-gNB. A red box highlights the left eNB node.</p> <p>Figure 5.3.2-1: The NSA Architecture</p>

	<div>10.2.1 EN-DC</div> <div>The Secondary Node Addition procedure is initiated by the MN and is used to establish a UE context at the SN to provide resources from the SN to the UE. For bearers requiring SCG radio resources, this procedure is used to add at least the first cell of the SCG. This procedure can also be used to configure an SN terminated MCG bearer (where no SCG configuration is needed). Figure 10.2.1-1 shows the Secondary Node Addition procedure.</div> <div></div> <div>Figure 10.2.1-1: Secondary Node Addition procedure</div> <div>Source: 5G Standard 3GPP TR 21.915 V15.0.0 (2019-09) pg. 11 https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3389</div> <div>Evolved Universal Terrestrial Radio Access (E-UTRA) and NR Multi-connectivity 3GPP TS 37.340 V16.0.0 (2019-12) pg 23 https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3198</div>
sending, by the second radio access network controller, the target radio access network information to the first radio access network controller.	In at least testing and usage, the accused product will comply with and use the 5G standard which dictates, sending, by the second radio access network controller (e.g., eNB), the target radio access network information (e.g., X2 to en-gNB) to the first radio access network controller (e.g., en-gNB).

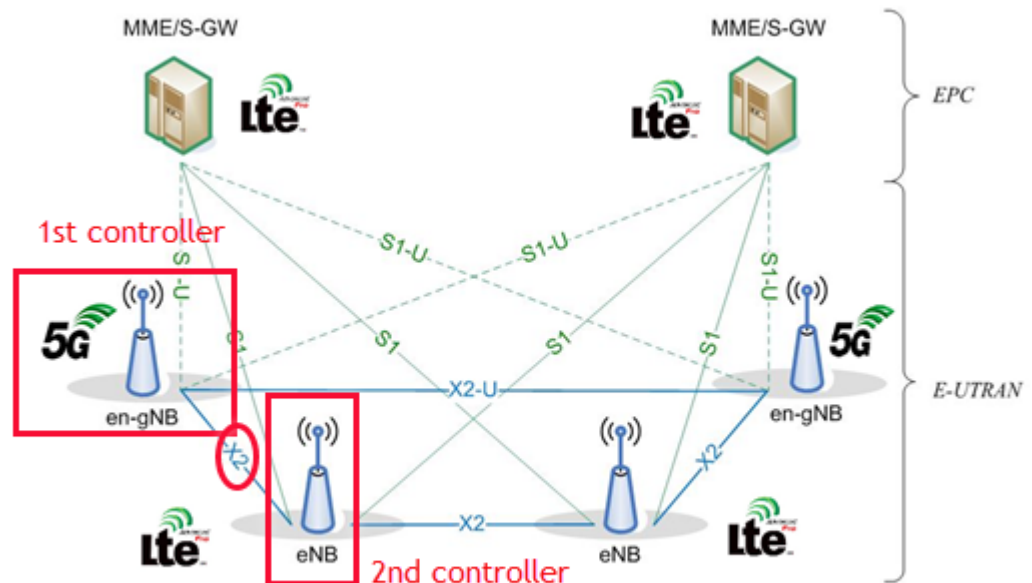


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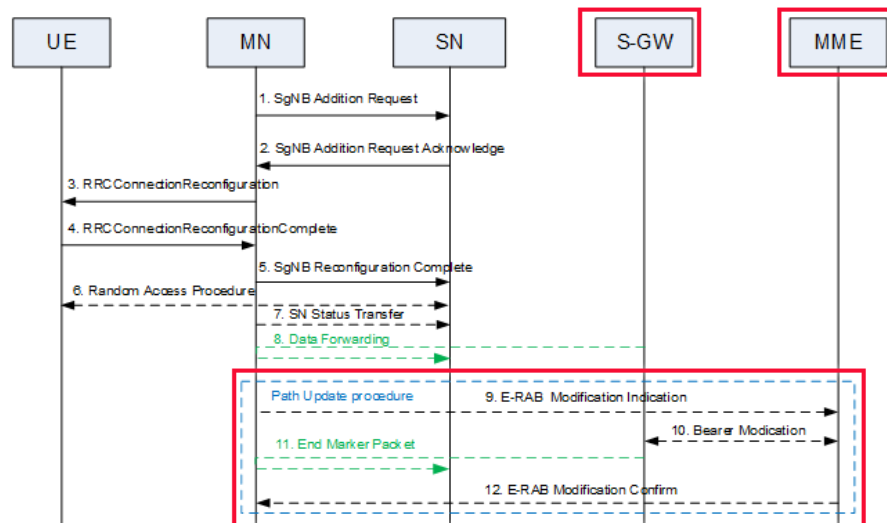


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